CLAIMS

What is claimed is:

1.   A method of using a storage module in a device comprising:

receiving data in the device;

identifying a code in the data;

replacing the code in the data with corresponding terms in the storage

module, prior to displaying the data.

2.   The method of claim 1, further comprising:

periodically updating data in the storage module.

3.   The method of claim 1, further comprising:

periodically replacing the storage module in the device to contain an

often-used set of terms.

4.   The method of claim 1, wherein a term may comprise one or more

of the following: a word, a phrase, a graphic element, an image, graphic

animation sequence, video clip, sound clip, applet, or a binary large object

(BLOB).

5.   The method of claim 1, further comprising:

storing a plurality of code-term pairs in the storage module; and

inserting the storage module into the device.

6.   The method of claim 1, wherein the data is received in the device

over a low bandwidth wireless connection.

1   7.   The method of claim 1, wherein the storage module is a device

2   selected from among the following: a Flash memory, a Clik! disk, an EEPROM, a

3   magnetic storage device, an IBM MicroDrive, and an optical storage device.

1   8.   The method of claim 1, further comprising:

2   gathering statistics about a frequency of occurrence of each code in the

3   storage module.

1   9.   The method of claim 8, further comprising:

2   transmitting the statistics to a central mechanism for updating contents of

3   the storage module.

1   10.   A service provider for providing data to a device via a low

2   bandwidth connection, the service provider comprising:

3   a database including a plurality of codes and associated terms;

4   a substitution logic to replace a term in the data with a code; and

5   a transmission logic to transmit the data including the code.

1   11.   The service provider of claim 10, further comprising:

2   a statistic gathering logic to gather statistics about a frequency of

3   occurrence of each terms in the data.

1   12.   The service provider of claim 11, further comprising:

2   an analyzing logic to analyze statistics and determine a set of useful terms

3   for inclusion in the database.

1   13.   The service provider of claim 12, further comprising:

2   a storage module updating unit to generate an updated data set for the

3   database and for a storage module.

1   14.   The service provider of claim 10, wherein the data in the database

2   is periodically updated.

1   15.   A portable device comprising:

2   a low bandwidth connection to a network to receive data;

3   a storage module including a plurality of codes and associated data;

4   a substitution logic for detecting the codes in the received data and

5   substituting the associated data for each of the codes;

6   such that the bandwidth of data transferred over the low bandwidth

7   connection is reduced by transmitting the codes instead of the associated data.

1   16.   The portable device of claim 15, wherein the low bandwidth

2   connection is a wireless connection.

1   17.   The portable device of claim 15, wherein the storage module is a

2   built-in device.

1   18.   The portable device of claim 15, wherein the storage module is a

2   removable device.

1   19.   The portable device of claim 18, wherein the storage module

2   comprises a storage module selected from among the following: a Flash memory,

3   a Clik! disk, an EEPROM, a magnetic storage device, an IBM MicroDrive, and an

4   optical storage device.

1   20.   The portable device of claim 15, further comprising a statistic

2   collection logic for identifying which of the codes are used.

1   21.   The portable device of claim 20, wherein the data in the storage

2   module is updateable, such that based on the statistics collected by the statistics

3   collection logic the contents of the storage module are periodically updated.

1   22.   A system comprising:

2   a first device having a low bandwidth connection to a network, the first

3   device including a storage module;

4   a second device for preparing data for display on the first device;

5   the second device including a copy of data on the storage module, the

6   second device replacing data sent to the first device with codes, if the data is in

7   the storage module;

8   whereby the bandwidth used for transmitting the data to the first device is

9   reduced.

SUB
A4

ADD
A5